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ABSTRACT

The following report describes one teacher's use of the Consumer Game in a class of seventh grade students in a target area school. These students were not highly motivated and displayed poor attitudes toward school, and it was hoped that a game experience might interest them. Despite unusual administrative conditions, the game appears to have taught the students important concepts. Their behavior in school and attendance records also showed improvement during the time they used the game, and as a group they sought an additional opportunity to play it. (Author)

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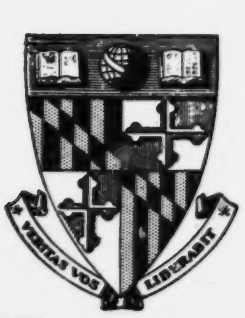

THE JOHNS HOPKINS UNIVERSITY

REPORT No. 65

THE CENTER FOR THE STUDY OF SOCIAL ORGANIZATION OF SCHOOLS

EFFECTS OF THE 'CONSUMER GAME' ON LEARNING AND ATTITUDES OF SELECTED SEVENTH GRADE STUDENTS IN A TARGET-AREA SCHOOL

BY

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MAY 1970

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ABSTRACT

The following report describes in detail one teacher's use of the 'Consumer Game' in a class of seventh grade students in a target-area school. These students were not highly motivated and displayed poor attitudes toward school, and it was hoped that a game experience might interest them. Despite rather unusual and somewhat chaotic administrative conditions, the game appears to have taught the students important concepts. Their behavior in school and their attendance records also improved during the time they used the game, and as a group they sought an additional opportunity to play it.

As a result of the success of the Consumer Game in an experimental summer school program,[1] the school administration of the City of Worcester decided to use the game once again, but in a regular school setting. They hoped that the game could be used advantageously in a target-area school with many truancy and attitude problems. A target area school is one that has a minimum of 10% of the students in that school coming from a family that is receiving some form of public assistance. The public assistance resources defining a Worcester target-area school are the Department of Public Welfare and the Aid to Families with Dependent Children programs. ("Consumer" involves players in the economics of installment buying. As consumers, they compete to make the best purchases for the least money; as credit agents, they compete to make the most satisfactory lending transactions.)

The administrators at the school in question, however, were skeptical about the efficacy of the game, particularly with a group handicapped by many other, major problems. Outstanding among them were: (1) students were forced to attend school during the afternoon portion of a double session day, due to crowding in the area; (2) many students, members of recently-arrived Puerto Rican families, had little or no English language proficiency; and (3) many students stayed in school only as long as legally necessary--i.e., until age 16--and were then encouraged by their families or necessity to leave and go to work.

Despite these obstacles, a program of game administration and evaluation was set up at the end of September, 1968. At this meeting,

the school principal and assistant principal agreed (1) to select a teacher interested in the game and willing to try it, (2) to make a special room available where the "noise level" associated with the game would not disturb other classes and teachers, and (3) to contact the investigator if any problems arose or if help was needed. We agreed that the game would be tried by the end of October and that follow-up questionnaires would be administered to the students after they had played the game, as well as to a "matched" group of students who had not played the game and who would serve as controls.

After a period of confusion and delay explained by illness, the transfer of personnel, etc., in March, 1969, I was told that the game would be used by the end of the month, that no observer or help was necessary, and that the questionnaires could be administered on April 10, 1969. Upon arriving at the school, I discovered that a teacher had used the game, but that it had not been explained to him. The teacher said that he was handed the game one day at the opening of a class and was told to use it immediately.[2] With no prior knowledge of the project or of the game, with no time for preparation, and with no knowledge that he could consult anyone about the game (which even had some of its materials missing),[3] he proceeded to set it up, assign the roles, and do the best possible under these extraordinary conditions. After the first day's session, he realized that he had set it up incorrectly. He explained this to the class, but they decided to continue with the game as they had begun it. They had five sessions of about 25 minutes each during abbreviated geography class periods and completed only one game.

Expecting very little in the way of results, I administered two questionnaires to the students who had played (the questionnaires appear in the Appendix to this report). The first one, Questionnaire C, involved attitudes toward school and toward some of the roles and concepts involved in the game, as well as ability to understand or define some of the concepts involved. The second questionnaire, Questionnaire E, involved reactions to the game as an experience per se. Since no control group had been designated by the school, I also administered Questionnaire C on the same day to another class taught by the same teacher. The class was comparable in age and in ability to the one that had played the game.

Results

The most striking result of this experiment appeared not in the questionnaires, but in the behavior of the students who had played the game: not only did they want to play it again, but they also suggested that they come in early on a "release time" day so that they could play it continuously rather than in twenty-minute snatches. Arrangements for them to do this were made.[4] The attendance record for this class also improved markedly during the week they played the game: the experimental group's number of absences was 17% lower than its record for the three weeks prior to the game and was 15% lower than the control group's record during the week in which the game was played. In addition, there were striking differences between the experimental and control groups' knowledge of concepts involved in the game. These results are explained in detail below.

Reactions of the Students to the Game Situation: Responses to Questionnaire E

In Questionnaire E the students were asked to compare their game experience to their regular classroom experience in a variety of ways. Fourteen students who had played the game responded to this questionnaire. The results of the comparisons are summarized below:

A majority[5] of students preferred the game to regular class for these reasons:

- 93% of the students thought that the game was more interesting or challenging than their regular class;
- 79% thought that the game allowed them more independence or freedom to work on their own;
- 79% thought that the game involved more competition with others in their class--100% liked this competition;
- 64% thought the game involved more cooperation with others in their class--93% liked this kind of cooperation;
- 57% thought the game made better use of their own talents or abilities than regular class work did;
- 50% thought the game was easier than regular class.

In several ways, however, the majority found their regular class preferable:

- 86% thought that their regular class was better organized than the game;
- 57% thought that the poorest student would prefer regular class to the game;
- 50% thought the game had more pressure than regular class;
- 50% thought that regular class gave them a better idea of how they were doing;
- 50% thought that teachers would prefer regular class to the game;
- 50% thought the best student in class would prefer regular class to the game.

This negative reaction to the game is undoubtedly due, in part at least, to the unusual conditions surrounding the game's use. It is more negative, however, than any reaction encountered in previous studies of simulation games using the same or similar measurements. On the whole, however, the students seemed to like the games approach. They talked about it outside of class, listing 1.6 people, on the average, that they had told about the game. They listed an average of 2.6 items they felt they had learned from the game, and they listed 1.6 items they liked about the game compared with only 0.43 they disliked about it.

Attitude and Information Changes as a Result of Consumer: Responses to Questionnaire C

Questionnaire C included ten items measuring attitude towards school and five items measuring understanding of or ability to define concepts involved in the game. Since the experimental and control groups were so small, numbering 14 and 19 respectively, I expected few statistically significant findings. Indeed, on the attitudinal items, only two out of thirty-three produced statistically significant differences between the groups, and such a small proportion of differences could easily be attributable to chance alone. On the informational items, however, striking differences appeared.

In the experimental group, students thought school was more interesting while in the control group students found school more boring, ($p \leq .10$, Questionnaire C, Item #1). On Item #4 of Questionnaire C,

the students were asked, "In a family with teenage children, who do you think should make the money decisions?" and four alternatives were offered: (1) Mother alone, (2) Father alone, (3) Mother and Father together, and (4) Parents and Children together. In the group that played the game, 50% selected the alternative "Parents and Children together." In the control group of students who had not played the game, only 36% thought that teenage children should be involved in the money decision-making process. Although this difference approaches only an acceptable level of statistical significance, in such a small group the trend is interesting.

The most striking difference between groups, however, emerged on the items measuring consumer information or knowledge (page 6 of Questionnaire C). On two of the five items, borderline significant differences were found. The following table summarizes these differences.

Concept Defined	% Correct Experimental (N = 14)	% Correct Control (N = 19)	Probability Level[6]
1. Principal	43	16	$p \leq .10$
2. Credit charge	29	31	N. S.
3. An installment	22	10	N. S.
4. Collateral	43	16	$p \leq .10$
5. Repossession	43	21	$p \leq .30$

Conclusions

It was obvious that even in these far from ideal conditions, the Consumer Game appears able to teach students important concepts. Whether or not this particular method is the most efficient one for teaching the concepts was not measured. In the game's favor, however, is the fact that the students found the game experience interesting enough to motivate them to attend school as well as to seek out an additional opportunity to play--this from a group of uninterested, unmotivated truants! In this small study, few if any attitudinal changes appeared. Learning did occur, however, and better conditions and better instruments might show how much. It certainly seems that further experiments with this simulation game as a teaching and motivating technique should be pursued.

FOOTNOTES

[1]See Cohen, Karen C., "The Effects of Two Simulation Games on the Opinions and Attitudes of Selected Sixth, Seventh and Eighth Grade Students," Report No. 42, Center for the Study of Social Organization of Schools, Johns Hopkins University, May, 1969.

[2]In addition to his vehement objections to such procedures, the teacher presented me with a letter he had prepared for my arrival, which explained his participation in the project. This letter appears in the Appendix.

[3]During the seven-month delay between planning and implementation of this project, some of the game forms and contracts disappeared.

[4]Although plans were made, they were not fully implemented. A release time day in May was selected. A new complete game was delivered to the school. The students and teacher arrived early on the designated day, coming to the art room in which they could move around freely and where the noise would not disrupt other classes. The principal, however, neglected to deliver the game to the teacher, and both the students and the teacher were frustrated and disappointed.

[5]Since three alternatives were offered for each item, i.e., choice of "game," "regular class," or "neither," (See Questionnaire E in the Appendix), a response by 50% of the students represented a majority opinion.

[6]These levels were calculated on the basis of the original group scores, not on the percentage scores.

APPENDIX

To Whom It May Concern:

The students initial response to consumer was satisfactory. In fact the students active involvement was good and considering the failure of the preparation factor, I am very pleased.

I was asked to participate in a program without the slightest background, and in which I did not know the functional conclusions hoped for or if they were reached. The class completed a "game" in which a "winner" was declared but not in the true context of the real procedure. I told the students of the failure on my part and then explained the proper way the game should be conducted and the values that can be applied. The students quickly saw how the procedures could be directed in their own future lives.

The class is interested in trying the game again, but we need the materials in the set replenished. Another factor missing in the game, was the absence of a "prize" for the winners which I think is inherent in any competition on this level.

signed,

Participating Teacher

We would like you to compare the Game you have been playing with the work you usually do in a regular class

1. Please write the name of game you have been playing here.

_____

2. Was the game easier or harder than your regular classroom work? (X one)

_____ game easier
_____ regular class easier
_____ neither easier

3. Which was more interesting or challenging?

_____ game more interesting
_____ regular class more interesting
_____ neither more interesting

4. Which allows you more independence or freedom to work on your own?

_____ game
_____ regular class
_____ neither

5. Which makes the best use of your own particular talents or abilities?

_____ game
_____ regular class
_____ neither

6. Do you have a better idea of how well you yourself are doing in the game or in your regular class work?

_____ game
_____ regular class
_____ neither

7. Do you think the game or your regular class work involves more competition with other students in the class?

_____ game
_____ regular class
_____ neither

7b. Do you like this competition or dislike it? _____ like it
_____ dislike it

8. Do you think the game or your regular class work involves more cooperation with other students in the class?

_____ game
_____ regular class
_____ neither

8b. Do you like this cooperation or dislike it? _____ like it
_____ dislike it

9. Did you feel greater pressure playing the game or doing regular class work?

_____ playing the game
_____ doing regular class work
_____ neither

10. Do you think the class runs more smoothly or is better organized during the game or during a regular class period?

_____ during the game
_____ during regular class
_____ neither

11. If you were a <u>teacher</u>, what kind of class would you rather teach?

_____ game
_____ regular class
_____ neither

Why? _____

_____

_____

12. If you were the <u>best</u> student in the class, what kind of class would you rather have?

_____ game
_____ regular class
_____ neither

Why? _____

_____

_____

13. If you were the <u>poorest</u> student in the class, what kind of class would you rather have?

_____ game
_____ regular class
_____ neither

Why? _____

_____

_____

14. In all the game sessions of play, did you win or lose more often?

_____ won more often
_____ won and lost about the same
_____ lost more often

15. Did you talk to anyone outside of this class about the game? If so, tell who they were in the space below.

16. We're interested in what kind of things students learn in a game like this one. What do you think you have learned so far in this game?

17. List below the things you like and don't like <u>about</u> <u>this</u> <u>game</u>.

<u>THINGS YOU LIKE</u>	<u>THINGS YOU DON'T LIKE</u>

1. WORK AS QUICKLY AS YOU CAN.

2. IF YOU HAVE A QUESTION, RAISE YOUR HAND AND A RESEARCH WORKER WILL COME TO YOU TO ANSWER IT.

3. FEEL FREE TO ANSWER EXACTLY THE WAY YOU FEEL, BECAUSE NO ONE IN YOUR SCHOOL WILL EVER SEE ANY OF YOUR ANSWERS.

FILL IN THE INFORMATION AT THE BOTTOM OF THIS PAGE.
THEN GO ON TO THE REST OF THE QUESTIONS.

YOUR NAME: _____

YOUR GRADE: _____

YOUR SCHOOL: _____

TODAY'S DATE: _____

FOR EACH SENTENCE, PUT AN "X" IN THE BOX NEAREST TO YOUR OWN OPINION. FOR EXAMPLE, FOR THE SENTENCE

I THINK TELEVISION IS

VERY INTERESTING							VERY BORING
	1	2	3	4	5	6	

YOU WOULD PUT AN "X" IN THE BOX OVER "1" IF YOU LIKE TELEVISION VERY MUCH AND THINK IT IS VERY INTERESTING,

YOU WOULD PUT AN "X" IN THE BOX OVER "6" IF YOU DISLIKE TELEVISION VERY MUCH AND THINK IT IS VERY BORING,

AND IF YOUR OPINION IS SOMEWHERE IN BETWEEN, YOU WOULD PUT AN "X" IN THE BOX CLOSEST TO WHERE YOUR OPINION IS.

1. MY SCHOOL WORK IS

VERY INTERESTING							VERY BORING
	1	2	3	4	5	6	

2. GETTING THE BEST VALUE FOR YOUR MONEY IS

VERY EASY							VERY HARD
	1	2	3	4	5	6	

3. TO ME, MATH IS

VERY INTERESTING							VERY BORING
	1	2	3	4	5	6	

4. MY SCHOOLWORK IS

VERY EASY							VERY HARD
	1	2	3	4	5	6	

5. I USUALLY AM

A GOOD SHOPPER							A POOR SHOPPER
	1	2	3	4	5	6	

6. THE BEST WAY TO PAY FOR THINGS IS

TO SAVE FOR THEM							TO BORROW FOR THEM
	1	2	3	4	5	6	

7. THE EASIEST WAY TO PAY FOR THINGS IS

TO SAVE FOR THEM							TO BORROW FOR THEM
	1	2	3	4	5	6	

8. FOR LATER LIFE, SCHOOL WORK IS

VERY IMPORTANT							NOT AT ALL IMPORTANT
	1	2	3	4	5	6	

9. BORROWING MONEY IS SOMETHING YOU SHOULD

TRY TO DO							TRY TO AVOID
	1	2	3	4	5	6	

10. SALESMEN WANT TO HELP YOU

SAVE MONEY							SPEND MONEY
	1	2	3	4	5	6	

11. IN MY LATER LIFE, MATH WILL BE

VERY USEFUL							NOT AT ALL USEFUL
	1	2	3	4	5	6	

12. I USUALLY HANDLE MY MONEY

VERY WISELY							VERY FOOLISHLY
	1	2	3	4	5	6	

13. IF YOU COULD HAVE $100.00 TO SPEND FOR THE WHOLE YEAR, WOULD YOU RATHER ("X"-one)

_____ get about $2.00 a week for the year

_____ have it all at the beginning

Why?_____

_____

_____

_____

14. In a family with teenage children, who do you think should make the money decisions? ("X"-one)

_____ Mother alone

_____ Father alone

_____ Mother and Father together

_____ Parents and Children together

Why?_____

_____

_____

_____

15. YOU SHOULD SPEND ALL THE MONEY YOU GET

STRONGLY AGREE							STRONGLY DISAGREE
	1	2	3	4	5	6	

16. BANKERS WANT TO HELP YOU SAVE MONEY

STRONGLY AGREE							STRONGLY DISAGREE
	1	2	3	4	5	6	

17. INTEREST RATES ARE THE SAME WHETHER YOU SAVE OR BORROW MONEY

STRONGLY AGREE							STRONGLY DISAGREE
	1	2	3	4	5	6	

18. NO MATTER HOW YOU PAY FOR SOMETHING IT COSTS THE SAME IN THE LONG RUN

STRONGLY AGREE							STRONGLY DISAGREE
	1	2	3	4	5	6	

19. PLEASE LIST BELOW ALL OF THE THINGS YOU

LIKE ABOUT SCHOOL	DISLIKE ABOUT SCHOOL
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

20. WOULD YOU LIKE TO GO TO SCHOOL EACH DAY FOR ("X"-one)

_____ LESS TIME

_____ THE SAME TIME

_____ MORE TIME

HOW MUCH MORE OR LESS TIME _____?

21. WOULD YOU LIKE A SUMMER VACATION WHICH IS

_____ LONGER

_____ ABOUT THE SAME

_____ SHORTER

HOW MUCH LONGER OR SHORTER _____?

22. HOW MUCH TIME DO YOU SPEND EACH DAY WATCHING T.V.?

_____ DON'T WATCH AT ALL
_____ AN HOUR OR LESS
_____ 1 - 2 HOURS
_____ 2 - 3 HOURS
_____ 3 - 4 HOURS
_____ MORE THAN 4 HOURS

23. HOW MUCH TIME DO YOU SPEND EACH DAY READING?

_____ DON'T READ AT ALL
_____ AN HOUR OR LESS
_____ 1 - 2 HOURS
_____ 2 - 3 HOURS
_____ 3 - 4 HOURS
_____ MORE THAN 4 HOURS

PLEASE CIRCLE THE LETTER OF THE ANSWER YOU THINK IS BEST.

1. Principal is
   a. the cost of borrowing money
   b. the total amount the borrower repays
   c. the amount borrowed or financed
   d. a clause in a contract
   e. don't know

2. The credit charge on a loan or purchase is
   a. interest only
   b. interest and penalty charges
   c. the money borrowed
   d. the total amount for repayment
   e. don't know

3. An installment is
   a. the same as a down payment
   b. one of a series of payments at regular intervals
   c. the charge made for borrowing money
   d. the contract evidencing a legal debt
   e. don't know

4. Collateral is
   a. something of value the lender is able to take if the consumer is unable to pay off his debt
   b. the amount of money borrowed from a sales finance company
   c. any special provision on a contract which the lender may require a borrower to agree to accept
   d. a term referring to someone who is a bad credit risk
   e. don't know

5. Repossession is
   a. a group of events which are not covered by insurance
   b. a legal proceeding in which a consumer takes a lender to court because he feels he has been cheated or misled
   c. the failure of a consumer to repay a debt on time
   d. when the consumer can't pay the lender on time and the lendor takes back the product the money or credit was used to buy
   e. don't know

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